

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,120	07/18/2001	Dana Ault-Riche	25885-1751	1666
75	90 10/02/2002			
HELLER EHRMAN WHITE & MCAULIFFE LLP			EXAMINER	
	A VILLAGE DR.	TRAN, MY CHAU T		
SAN DIEGO, C	CA 92122-1246		ART UNIT	PAPER NUMBER
			1641	
			DATE MAIL ED: 10/02/2002	а

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
		AULT-RICHE ET AL.			
Office Action Summary	09/910,120	Art Unit			
omoo / totae// camma/y	Examiner				
The MAILING DATE f this communication app	My-Chau T. Tran	1641			
Period for Reply		, a			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status					
1) Responsive to communication(s) filed on 12 A	<u> August 2002</u> .				
2a) This action is FINAL . 2b) Th	This action is FINAL . 2b) This action is non-final.				
3) Since this application is in condition for allowated closed in accordance with the practice under					
Disposition of Claims	Ex parte Quayle, 1955 C	.b. 11, 400 O.G. 213.			
4) Claim(s) 1-98 is/are pending in the application	1.				
4a) Of the above claim(s) is/are withdraw	wn from consideration.				
5) Claim(s) is/are allowed.					
6) Claim(s) is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) <u>1-98</u> are subject to restriction and/or example.	election requirement.				
Application Papers					
9) The specification is objected to by the Examine		Ab a Farancia an			
10) The drawing(s) filed on is/are: a) acception to the	•				
Applicant may not request that any objection to the 11) The proposed drawing correction filed on					
If approved, corrected drawings are required in re		and provide by the Examinor.			
12) The oath or declaration is objected to by the Ex	•				
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1.☐ Certified copies of the priority documents have been received.					
Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of	Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)			



DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-37 and 93-94, drawn to a combination, classified in class 530, subclass300.
 - II. Claims 38-48 and 59, drawn to a set of oligonucleotides, classified in class 436, subclass 518.
 - III. Claims 49-54, drawn to a system for sorting collections of molecules, classified in class 536, subclass 22.1.
 - IV. Claims 55-58, drawn to a plurality of arrays, classified in class 435, subclass 4.
 - V. Claims 60 and 62, drawn to a method for creating a tagged library, classified in class 435, subclass 91.1.
 - VI. Claims 61, and 65-66, drawn to a library, classified in class 536, subclass 23.1.
 - VII. Claims 63 and 64, drawn to a method for creating a tagged library with a region E_m, classified in class 435, subclass 41.
 - VIII. Claims 67-74, drawn to a method for screening a nucleic acid library, classified in class 435, subclass 6.
 - IX. Claims 75-90, drawn to a method for nested sorted, classified in class 436, subclass 86.
 - X. Claims 91-92, drawn to a collection of molecules, classified in class 424, subclass139.1.



XI. Claims 96-98, drawn to a method of sorting nucleic acid libraries, classified in class 436, subclass 55.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions of Groups I, II, III, IV, VI, and X are unrelated and independent inventions. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions as claimed have different required components that has different functions and different effects. The feature of a plurality of capture agents that binds specifically to a polypeptide of Group I is not required by the claims of Groups II, III, IV, VI, and X. The feature of a formula of 5'-D_n-E_m-3' of Group II is not required by the claims of Groups I, III, IV, VI, and X. The feature of a computer system with software for analyzing results of sorts of Group III is not required by the claims of Groups I, II, IV, VI, and X. The feature of a support for linking captures agents and the capture agents are immobilized at discrete loci of Group IV is not required by the claims of Groups I, II, III, VI, and X. The feature of a library of Group VI is not required by the claims of Groups I, II, III, IV, and X. The feature of a set of epitope tags of Group X is not required by the claims of Groups I, II, III, IV, and X. The feature of a set of epitope tags of Group X is not required by the claims of Groups I, II, III, IV, and VI.
- 3. Inventions of Groups V, VII, VIII, IX, and XI are unrelated and independent inventions. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions as claimed have different



method steps and modes of operation. The method step of incorporating the set of oligonucleotides into a nucleic acid molecule in a library of nucleic acid of Group V is not required by the claims of Groups VII, VIII, IX, and XI. The method step of incorporating the set of oligonucleotides with a region E_m into a nucleic acid molecule of Group VII is not required by the claims of Groups V, VIII, IX, and XI. The method step of screening the complexed capture agents of Group VIII is not required by the claims of Groups V, VII, IX, and XI. The method step of amplifying each of the samples with a primer of Group IX is not required by the claims of Groups V, VII, VIII, and XI. The method step of linking a sequence of nucleotides that encodes an epitope of Group XI is not required by the claims of Groups V, VII, VIII, and IX.

- 4. Inventions of Group I (apparatus) and Group V (process) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

 (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as the method of Group VII. This restriction requirement is also applicable with the apparatus of Groups II, III, IV, and X.
- 5. Inventions of Group I (apparatus) and Group VII (process) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.



(MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as the method of Group V. This restriction requirement is also applicable with the apparatus of Groups II, III, IV, and X.

- 6. Inventions of Group VI (product) and Group V (process) are related as process of making and product made. The inventions are distinct if either or both of the following can be shown:

 (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the apparatus as claimed can be used to practice another and materially different process such as the method of Group VII.
- 7. Inventions of Group VI (product) and Group VII (process) are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the apparatus as claimed can be used to practice another and materially different process such as the method of Group V.
- 8. Inventions Group I (apparatus) and Group VIII (process) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.



(MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as the method of Group IX or the method of immobilizing DNA or protein. This restriction requirement is also applicable with the apparatus of Groups II, III, IV, VI, and X.

- 9. Inventions Group I (apparatus) and Group IX (process) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

 (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as the method of Group XI or the method of immobilizing DNA or protein. This restriction requirement is also applicable with the apparatus of Groups II, III, IV, VI, and X.
- 10. Inventions Group I (apparatus) and Group XI (process) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

 (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as the method of Group VIII or the method of immobilizing DNA or protein. This restriction requirement is also applicable with the apparatus of Groups II, III, IV, VI, and X.



11. Because these inventions are distinct for the reasons given above and the searches required are not co-extensive thus requiring a burdensome search, restriction for examination purposes as indicated is proper. Additionally, different patentability considerations are involved for each group. For example, a patentability determination for Group III would involve a determination of the patentability of a computer system with software for analyzing results of sorts while a patentability determination for Group V would involve a consideration of the patentability of the method for creating a tagged library. These considerations are very different in nature.

- 12. This application contains claims directed to the following patentably distinct species of the claimed invention.
- 13. If applicants elect the invention of **Group I**, applicants are required to further elect from the following patentably distinct **Species A** of the claimed invention:

Species A	Claim No.	The formula comprises:
(1)	24	5'-E _m -3'
(2)	25	5'-C-E _m -3'
(3)	26	5'-D _n - E _m -3'

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, 1-23, 29-37, and 94-95 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable



thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

- 14. This application contains claims directed to the following patentably distinct species of the claimed invention.
- 15. If applicants elect the invention of **Group II**, applicants are required to further elect from the following patentably distinct **Species B** of the claimed invention:

Species B	Claim No.	The formula comprises:
(1)	43-44	5'-C-D _n -3'
(2)	45-46	$5'$ -C- E_p - FA_s - $3'$
(3)	47	5'-C-FB _z -3'
(4)	48	5'-FB _z -3'



Application/Control Number: 09/910,120

Art Unit: 1641

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, 38-39 and 59 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

16. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Application/Control Number: 09/910,120

Art Unit: 1641

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the 17.

inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

currently named inventors is no longer an inventor of at least one claim remaining in the

application. Any amendment of inventorship must be accompanied by a request under 37 CFR

1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to My-Chau T. Tran whose telephone number is 703-305-6999.

The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Long V. Le can be reached on 703-305-3399. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-308-4242 for regular

communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-308-0196.

mct

September 28, 2002

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 1600

10/01/02

Page 10